XXXII General Meeting

of the

American Electrochemical Society

PITTSBURGH, PA.

October 3, 4, 5, 6, 1917

LOCAL COMMITTEES.

Executive Committee.

Mr. Carl G. Schluederberg, Chairman;

Mr. P. M. Lincoln,
Mr. Philo Kemery,
Mr. Fred Crabtree,
Mr. S. L. Goodale,
Mr. L. C. Turnock,
Mr. R. E. Zimmerman.

Finance Committee.

Mr. Carl G. Schluederberg, Chairman;

Mr. H. K. Hitchcock,
Mr. Earl Blough,
Mr. James J. Flannery,
Mr. E. B. Clarke,
Mr. Samuel G. Stafford.

Membership Committee.

Mr. S. L. Goodale, Chairman;

Mr. Bradley Dewey,
Mr. Hugh Rodman,
Dr. J. H. James,
Mr. C. E. Skinner,
Mr. R. F. Bacon,
Mr. Jos. McKinley,
Mr. E. Friedlaender,
Mr. C. H. Viol,
Mr. B. Wiley,
Mr. N. Stahl,

Excursion Committee.

Mr. L. C. Turnock, Chairman;

Dr. J. H. James,
Mr. H. K. Hitchcock,
Mr. Earl Blough
Mr. Hugh Rodman,
Mr. C. E. Skinner,
Mr. C. B. Gibson,
Mr. S. L. Goodale,
Mr. Philo Kemery,
Mr. J. T. Brown,
Mr. W. E. Moore,
Mr. J. W. Offutt,
Mr. Bradley Dewey,
Mr. Fred Crabtree,
Mr. Frank Garratt,
Mr. G. W. Sargent,
Mr. F. N. Speller.

Papers Committee.

Mr. R. E. Zimmerman, Chairman;

Mr. Bradley Dewey,
Mr. S. L. Goodale,
Mr. C. E. Skinner,
Mr. R. F. Bacon,
Mr. P. M. Lincoln,
Mr. Hugh Rodman,
Mr. H. Hibbert,
Dr. J. H. James,
Mr. Frank Thornton,
Mr. T. H. Schoepf,
Mr. G. P. McNiff,
Mr. O. W. Storey,
Mr. F. H. Wilcox,
Mr. C. H. Tabor, Jr.,
Mr. C. A. Crawford.

Entertainment Committee.

Mr. Fred Crabtree, Chairman;

Mr. H. K. Hitchcock,
Mr. T. P. Schoepf,
Mr. Jos. McKinley,
Mr. Chas. Pope,
Mr. F. N. Speller,
Mr. John Unger,
Mr. F. L. Slocum.

Publication Committee.

Mr. Philo Kemery, Chairman;

Mr. M. C. Turpin,
Mr. S. W. Farnsworth,
Mr. L. H. Fawcett.

Hotel Committee.

Mr. P. M. Lincoln, Chairman;

Mr. F. N. Speller,
Mr. C. E. Stephens,
Mr. S. M. Kier,
Mr. Hugh Rodman.

GENERAL INFORMATION.

HOTEL HEADQUARTERS.

Headquarters and Registration Bureau will be at the William Penn Hotel. It is recommended that members write for reservations. Rates at this and other Pittsburgh hotels are given on page fifteen of the program. Mr. P. M. Lincoln, 6830 Thomas Blvd., Pittsburgh, Pa., Chairman of the Hotel Committee, will negotiate hotel reservations if desired.

On Wednesday, October 3, at 10:30 o'clock A.M., a registrar will be at the William Penn Hotel to receive arriving members and guests, distribute badges and programs, and give other information.

Guests should be introduced by members and when registered may attend the sessions and receive such other courtesies as may be extended to them by the Local Committee or the Officers of the Society.

The members of the Society and others anticipating attendance at the meeting are especially urged by the Officers of the Society and the Local Committee to arrive in Pittsburgh on Wednesday, October 3, so as to participate in the informal get-together meeting to be held at the Oakmont Country Club, where golf and other recreations will be the order of the day, and dinner will be served in the evening. This will afford an excellent opportunity for the promotion of acquaintance and good fellowship among the members previous to the meeting.

PLACES OF MEETING.

All the sessions of Thursday and Friday will be held in the Auditorium of the William Penn Hotel, on the seventeenth floor.

ENTERTAINMENT FOR LADIES.

WEDNESDAY, OCTOBER 3.

Registration at Electrochemical Society's headquarters, William Penn Hotel, from 10:30 A.M. on.

Members and their ladies will play golf at Oakmont Country Club. Automobiles will leave William Penn Hotel at 1:30 P.M.

Informal dinner at 6:30 P.M.

Dancing or cards in the evening.

Mr. and Mrs. H. K. Hitchcock and Mr. and Mrs. Frank Slocum in charge.

THURSDAY, OCTOBER 4.

Registration for ladies, 9:30 to 10:30 A.M.

Invitation luncheon at Heinz Plant. Time given later.

Excursion to visit different educational institutions.

Informal reception at 9:30 P.M. in Blue Room of William Penn Hotel.

Mr. and Mrs. Hugh Rodman and Mr. and Mrs. Frank N. Speller in charge.

FRIDAY, OCTOBER 5.

Automobiles will leave William Penn Hotel at 10 A.M. for drives through parks, etc.

Luncheon at 12:30 at University Club.

Play at School of Design, Carnegie Institute of Technology, at 3 P.M. Program will be given later.

Banquet in Ball Room of William Penn Hotel at 7:45 P.M., with special entertainment features. Mr. and Mrs. Crabtree in charge.

SATURDAY, OCTOBER 6.

Automobiles will leave William Penn Hotel (hour given later) for the Willows, where

luncheon will be served. Afterwards drive to Aspinwall Field Club for Tea.

This program is subject to change if weather is not favorable.

It is urgently requested that all ladies be registered, immediately upon arrival, in a special register at the Society's headquarters. This will be in charge of Mrs. C. C. Vogt.

An Information Bureau, in charge of Mrs. Jas. O. Handy, will be maintained at the Society's headquarters for the benefit of visiting ladies. Information regarding points of interest, the various stores, etc., will be available.

PROGRAM.

WEDNESDAY, OCTOBER 3, 1917.

10:30 A.M. Registration begins at Headquarters, William Penn Hotel.

1:30 P.M. Automobiles will leave the William Penn Hotel for the Oakmont Country Club, fifteen miles distant, where members will have an informal get-together meeting and golf will be provided for those who desire to play.

Ladies are especially invited to participate in this trip.

Oakmont Trip—in charge of Messrs. H. K. Hitchcock and F. L. Slocum.

6:30 P.M. Informal dinner at Oakmont Country Club, $1.50 per plate.

8:00 P.M. Meeting of the Board of Directors and Publication Committee.

Members may return to Pittsburgh during the evening either by automobile or train.

In case any members should arrive in Pittsburgh after the automobiles have left the Hotel, they can easily reach the Oakmont Country Club by train from the Pennsylvania Station to Oakmont, where they will be met by automobile. In such cases, Mr. H. K. Hitchcock should be notified by telephone at the Club.

THURSDAY, OCTOBER 4, 1917.

Registration at Headquarters.

10:00 A.M. Opening meeting of the Society in the Auditorium of the William Penn Hotel.

NOTES.

(Numbers prefixed to papers on program indicate papers printed in advance, numbered correspondingly.)

Address of welcome by Dr. John A. Brashear and response by President of the Society.

Reading and Discussion of Papers.

Henry Randall: Hydroelectric Power.

W. H. Coggswell: Trend in Electric Furname Design.

(15) J. L. McK. Yardley: The Sub-station Problem of the Electrochemical Plant.

Robert Turnbull: Electric Pig Iron in War Time.

(16) R. E. Lowe: A Method of Procedure for the Commercial Analysis of Ferro-silicon.

Frank Thornton, Jr.: A Resistance Furnace.

Haakon Styri: The Electric Furnace in the Development of the Norwegian Iron Industry.

T. F. Baily: Resistance Type Furnace for Melting Brass.

T. D. Yensen: Preparation of Pure Alloys for Magnetic Purposes.

(1) E. D. Campbell: The Influence of the Temperature of Measurement on the Electrical Resistivity and Thermo-Electromotive Potential of Solutes in Steel.

(6) O. L. Kowalke: Calorized Iron as an Element for Thermo-Couples.

W. M. Corse and G. F. Comstock: Copper Castings for Electrical Use.

(8) H. C. P. Weber: Silver Peroxide and the Valence of Silver.

Carl Hering: Suggesed Reforms in some Chemical Terms.

1:00 P.M. Complimentary luncheon at William Penn Hotel.

NOTES.

2:00 P.M. Optional excursions to various industrial plants in the Pittsburgh district.

Trip No. 1.—American Zinc and Chemical Co., Langloth, Pa. Special Train will leave Pennsylvania Station at 2:15 P.M., in charge of Prof. Goodale. Fare, $1.00.

Trip No. 2.—Thursday or Friday. Research Laboratory of American Sheet & Tin Plate Company, Pittsburgh, Pa. Reached by 15 minute street car ride. In charge of Messrs. R. E. Zimmerman and C. A. Crawford.

Trip No. 3.—Thursday and Friday. Mellon Institute of Industrial Research, Pittsburgh, Pa. Reached by 15 minutes street car ride. In charge of Messrs. Bacon, Weidlein and Hamor.

Trip No. 4.—University of Pittsburgh, Pittsburgh, Pa.

Trip No. 5.—Carnegie Technical School.

Trip No. 6.—Carnegie Museum. Thursday or Friday. These three institutions are located near each other, also near trip No. 2, and can be reached by 15 minutes street car ride and visited at the convenience of the members.

8:00 P.M. Illustrated address by Alex. Dow, President, Detroit Edison Company: "The Production of Electricity by Steam Power." Followed by general discussion of the power problem.

9:30 P.M. Informal reception, light refreshments, music and dancing. In charge of Mr. and Mrs. Hugh Rodman and Mr. and Mrs. F. N. Speller.

NOTES.

FRIDAY, OCTOBER 5, 1917.

9:30 A.M. Reading and Discussion of papers.

"Symposium on Electrochemical War Supplies."

(11) C. H. Viol and G. D. Kammer: The Application of Radium in Warfare.

(5) W. D. Marshall: Chlorine as a War Factor.

L. B. Cherry: Synthetic Gasoline by Electrochemical Means.

(17) C. W. Hill and G. P. Luckey: The Spectroscopic Determination of Small Amounts of Lead in Copper.

(14) J. L. Jones: The Electrolytic Recovery of Copper and Sulphuric Acid from Copper Mill Pickling Solutions.

(13) J. Coulson: Electrolytic Pickling Process and its Effect on the Physical Properties of Metals.

O. W. Storey: The Corrosion of Fence Wire.

(12) L. C. Turnock: The Effect of Lithium Hydrate upon the Capacity of the Edison Storage Battery.

(10) T. S. Fuller: The Prevention of Brittleness in Electroplated Steel Springs.

(7) J. L. Jones: A New Electro Analysis Apparatus.

(2) O. P. Watts and N. D. Whipple: The Corrosion of Metals by Acids.

(9) W. D. Bancroft: The Poisoning of Catalytic Agents.

(4) W. D. Bancroft: Fractional Combustion.

(3) W. D. Bancroft: Theory of Contact Catalysis.

NOTES.

2:00 P.M. Optional excursions to various industrial plants in the Pittsburgh district.

Trip No. 7.—Benzol and By-product coke plants, Briar Hill Steel Co., Youngstown, Ohio. In charge of Messrs. R. A. Johnson, Geo. Haney and F. T. Moran.

Trip No. 8.—New Laboratory of the Youngstown Sheet & Tube Co. In charge of Messrs. R. A. Johnston and D. A. Russell.

Trip No. 9.—Atlantic Refining Co., Pittsburgh, Pa. In charge of Philo Kemery. Reached by special car, which will be provided.

Trip No. 10.—Owens Bottle Works, Sharpsburg, Pa. In charge of Philo Kemery. Reached by special car in conjunction with Trip No. 9.

Trip No. 11.—Republic Chemical Company, Neville Island. Detinning process and manufacture of chlorine. In charge of Mr. L. C. Turnock. Special car will be provided for this trip.

Trip No. 12.—Radium Research Laboratory of the Standard Chemical Company. In charge of Mr. C. H. Viol and Mr. R. E. Zimmerman. Reached by 15 minutes street car ride.

7:45 P.M. Informal dinner, with special entertainment features. $2.50 per plate. The ladies are especially invited to attend. In charge of Prof. and Mrs. Fred Crabtree.

NOTES.

SATURDAY, OCTOBER 6, 1917.

All-day excursion on special train, with complimentary luncheon, through the most interesting manufacturing centers of the Pittsburgh district visiting the plants of the

Westinghouse Elec. & Mfg. Co.

National Tube Company.

Duquesne Works of the Carnegie Steel Company, where the largest electric furnaces are in operation.

The American Window Glass Company (showing the manufacture of Window Glass by Automatic Machinery and various other processes of interest to electrochemists). In charge of Messrs. L. C. Turnock and Prof. Crabtree.

HOTELS.

Hotel.	Location.	Rooms with Bath. Single.	Rooms with Bath. Double.	Rooms without Bath. Single.	Rooms without Bath. Double.
William Penn	Sixth Ave.	$3.00	$3.50	$2.00	$2.50
Fort Pitt	10th St. and Penn Ave.	3.00	3.50	2.00	2.50
Schenley	Grant Blvd. and Forbes St.	3.00	4.00	2.00	3.00
Henry	417 5th Ave.	2.50	3.00	1.50	2.00

OFFICERS OF THE SOCIETY.

PRESIDENT:

Colin G. Fink.

PAST PRESIDENTS:

L. Addicks, F. A. J. FitzGerald.

VICE-PRESIDENTS:

C. G. Schluederberg, H. C. Parmelee,
A. L. Walker, F. C. Frary,
F. J. Tone, J. W. Beckman.

MANAGERS:

L. D. Vorce, E. F. Roeber,
Acheson Smith, Carl Hering,
W. H. Walker, L. E. Saunders,
W. D. Bancroft, J. A. Mathews,
A. T. Hinckley.

TREASURER:

Pedro G. Salom.

SECRETARY:

Jos. W. Richards, Lehigh University,
South Bethlehem, Pa.

LOCAL SECTIONS OF THE SOCIETY.

Wisconsin Section (Madison, Wis.).

C. F. Burgess, Chairman, Madison, Wis.
O. P. Watts, Secretary, University of Wisconsin.

Philadelphia Section.

Carl Hering, Chairman.
S. S. Sadtler, Secretary, Philadelphia, Pa.

New York Section.

J. V. N. Dorr, Chairman, New York City.
J. M. Muir, Secretary-Treasurer, New York City.

Pittsburgh Section.

C. G. Schluederberg, Chairman, Pittsburgh, Pa.
S. L. Goodale, Secretary-Treasurer, Pittsburgh, Pa.

Niagara Falls Section.

F. J. Tone, Chairman, Niagara Falls, N. Y.
A. T. Hinckley, Secretary, Niagara Falls, N. Y.

Entrance Fee, $5.00. (Students are exempt from paying entrance fee.) Yearly Dues, $5.00. Application blanks and any other information may be obtained from the Secretary. Each member receives the Publications of the Society, in pamphlet form, containing the papers and discussions of the General Meetings of the Society. Members can obtain the bound volumes of Transactions for an extra payment of $5.00 per year.

LADIES' ENTERTAINMENT COMMITTEES.

Executive Committee.

Mrs. Fred Crabtree, Chairman,
Mrs. Carl G. Schluederberg,
Mrs. Halbert K. Hitchcock,
Mrs. Raymond Bacon,
Mrs. Paul Lincoln,
Mrs. James O. Handy,
Mrs. Frank Slocum,
Mrs. Hugh Rodman,
Mrs. Frank N. Speller,
Mrs. Stephen L. Goodale,
Mrs. C. C. Vogt.

Official Registrar for Women.
Mrs. C. C. Vogt.

Information Bureau.
Mrs. James O. Handy.

Transportation Committee.

(To co-operate with Men's Committee as to number of automobiles required for different trips for ladies.)

Mrs. Raymond Bacon, Chairman,
Mrs. Paul Lincoln,
Mrs. Eben Clark,
Mrs. Hugh Rodman,
Mrs. F. N. Speller,
Mrs. H. K. Hitchcock,
Mrs. J. J. Flannery.

Reception Committee.

Mrs. Carl G. Schluederberg, Chairman,
Mrs. Raymond Bacon,
Mrs. H. K. Hitchcock,
Mrs. Eben Clark,
Mrs. James O. Handy,
Mrs. C. E. Skinner,
Mrs. F. N. Speller,
Mrs. J. S. Unger,
Mrs. H. C. Ray,
Mrs. F. S. Slocum,
Mrs. J. J. Flannery,
Mrs. Hugh Rodman,
Mrs. F. G. Stafford,
Mrs. H. P. Tieman,
Mrs. L. C. Turnock,
Mrs. R. E. Zimmerman,
Mrs. Joséph James,
Mrs. F. H. Wilcox,
Mrs. Reid Stewart,
Mrs. Paul M. Lincoln,
Mrs. Geo. S. Page,
Mrs. Philo Kemery,
Mrs. S. M. Kier,
Mrs. Bradley Dewey,
Mrs. Earl Blough,
Mrs. James Aston,
Mrs. Frederick Crabtree.